

# Students will suffer most, U of T warns

In a submission to the Ontario Council on University Affairs, President John Evans has forecast the gloomy future of the University of Toronto if the provincial government holds to its announced intention of limiting the increase in the basic income unit for 1975-76 to 7.4 per cent.

"We share the dismay that pervades the university system at the prospect of still further attrition of staff, increase in class size, shortage of supplies, obsolescence of equipment, heavy turnover and loss of morale that are implied in an increase of less than half the minimum we need," the U of T brief said. "In essence, it is the students who will bear the brunt of this cut-back."

It will no longer be feasible to retain the quality of existing programs, the University warned. There will be no reductions in library hours and in the acquisition of books and periodicals; there will be no relief in the staffing of certain programs which had had extremely high increases in enrollment; innovative programs "will be beyond our reach"; highly promising programs now being developed "must be starved or abandoned", and "we might find ourselves forced actually to release staff in 1976-77."

The salary bill for staff, academic and non-academic, is such that, since the Provincial Treasurer has said he would prefer the universities not to incur deficits, "our only al-

ternative for 1975-76 is dismissal of a large number of staff, or very low salary increases." The brief continued: "Wholesale sudden firings would have a devastating effect on staff morale and on the quality of teaching and research; that course of action is inconceivable... But it is also impossible for us to ask our staff to accept salary increases at a level about half the rise in the cost of living during the preceding 12 months when government settlements this year in related occupational categories have produced pay differentials that in some cases are over 30 per cent."

MORE ON PAGE 3

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## University asked to propose substantial '75-'76 savings

The Governing Council meeting on Dec. 19 began with a request from Prof. Gary Thaler that the President should bring the members up-to-date about the current financial prospect. Dr. Evans said that since the Government's announcement of funding levels for 1975-76 there had been extensive discussions with Government representatives at many levels to determine what opportunities for amelioration might exist.

These discussions give no grounds for optimism, he said. It appears that the decision to fund the universities at a rate so far below the rate of inflation was not an aberration but a deliberate change in provincial priorities, and that no significant modification likely in the immediate future. The other older Ontario universities are accommodating themselves to the level of funding and to the Provincial Treasurer's warning against deficits, though often through stern measures, such as a freeze on all new appointments, even where there is substantial growth in student numbers.

### More savings sought

On this campus, Dr. Evans continued, there has been an extensive review of the 1975-76 budget by the administration and an attempt to consider it along

with that for 1976-77, since only thus can the University accommodate to the funding level without serious disruption of programs and dismissal of staff. The deans, principals and directors have been asked to bring forward recommendations for substantial additional savings. It is hoped that the division heads will work out the most appropriate and least damaging method of responding to the financial situation. Salary increments for the academic and non-academic staff will probably not be settled until some time in January.

Unanimous approval was given by the Council to a proposal to expand the degree program in Physical and Occupational Therapy to provide degree-completion programs for diploma-holders. Mrs. Patti Fleury, who seconded Prof. John Dove's motion to this effect, said that the package offered to her fellow-graduates in P. and O.T. was no Christmas package—it would mean a great deal of work to earn the degree.

It is not something they

greatly desired, nor is it easily endorsed the program's being located in Woodsworth College.

The longest debate took place over the proposal for restructuring the Council of the Faculty of Social Work. This had been discussed at great length in the Academic

Affairs Committee, and the principal objection raised by the students to the composition of the proposed Social Work Council (that it would have eight students and twelve faculty members) had already been debated in that committee. A motion to refer the matter back to Academic Affairs was defeated after a long argument, and the proposal was approved.

### Campus Centre approved

The Business Affairs Committee recommended approval of the Campus as Campus Centre project with a warning that if outside funding cannot be raised it will have to be partially financed from University funds. Stephen Moses said that a feasibility study had shown that some aspects could not only be self-amortizing but also show a real profit. William H. Broadhurst said there were several possible ways to handle the funding over a period of time. The Governing Council approved this project, and also a letter of recommendation from Business Affairs for a parking structure, below grade, on the site of the old steam plant between the McMurtry Building and Queen's Crescent.

The next meeting of the Governing Council will be held at 4:30 p.m. on Jan. 23.

## Electrical engineering wins praise

The Electrical Engineering Department receives high praise for its graduate program in a report recently issued by the advisory committee on academic planning of the Council of Ontario Universities.

Four departments are recognized as having "high overall capacity" for giving the Ph.D. degree: Carleton, McMaster, Toronto, and Waterloo. Toronto's

department is distinguished by having the broadest coverage of areas—seven, including one—biomedical electronics—which is unique in Canada.

The report notes in the departmental faculty the presence of a large number of "stars", a "person" with an outstanding publication record, an international reputation in his specialty, and an ability to directly

attract graduate students who come to work with him."

The consultants employed by the committee describe the program in Electrical Engineering as traditional, express satisfaction with the range of courses offered, and add, "the student... has probably the best selection of courses to choose from of any university in Ontario." It notes that a much higher proportion of them (60 per cent of the students) are Canadians, "than is true at most other Ontario universities."

The report calls the physical facilities "outstanding", although it has reservations concerning the dispensation of the department over a number of buildings, which prevents optimum communication and student interaction.

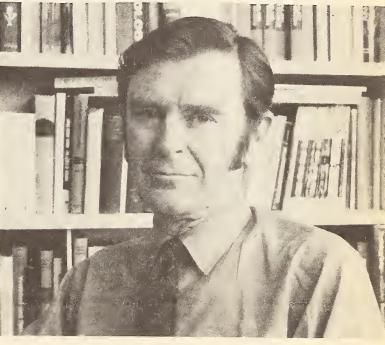
The report concludes that the Electrical Engineering Department of the University of Toronto compares favourably with any of the major institutions in North America.

### Associate deans and registrar sought

Terms of office for Associate Deans W.J. Huggett (Humanities) and I.M. Spigel (Social Sciences) at Erindale College expire June 30. Nominations and/or applications to fill these positions (for a three-year term) are invited from interested faculty on the St. George, Erindale and Scarborough campuses.

The position of Registrar, Erindale College, becomes vacant on July 1, when Dr. J.J. Rao retires. The College would be pleased to receive applications and/or nominations for this post.

Applications for all three positions should be sent, along with curriculum vitae and names of three referees, to: Dr. E.A. Robinson, Principal, Erindale College, University of Toronto.



Prof. Hugh Aitken

## Economist appointed to the Bissell Chair

Economic historian Dr. Hugh Aitken, professor of economics at Amherst College, Massachusetts, has been appointed by President Evans to the Claude Bissell Chair in Canadian/American Relations for 1975. Prof. Aitken met with his first group of graduate students on Tuesday, a group which previously had been under the tutelage of Prof. J.H. Dales.

Born in England and educated in Scotland, Hugh Aitken began his studies at St. Andrew's University. They were interrupted by service in the Royal Air Force. With a first class honours degree in economics and philosophy, he came to the University of Toronto after the Second World War with a Hudson's Bay Company Fellowship and studied for his M.A. in economics under the late Harold Innis.

After completing his doctoral work in economics at Harvard University in 1951, Dr. Aitken remained at Harvard for a further five years as research fellow before moving to the University of California. He became an American citizen in 1957, and in 1963 was appointed chairman of the department of economics at the University of California. He took up his present post at Amherst College in 1965.

Dr. Aitken's particular research interests are in the history of technological change, and he is nearing completion of a book on the early history of radio and electronics, which, he believes, have had profound influence on contemporary life. He is the author or editor of nine books ranging over many aspects of the economic history of Canada and the U.S. These include: *The Welland Canal Company: A Study in Canadian Enterprise, American Capital and Canadian Resources*; and *Did Slave Power Promote the Economics of Black Slavery in the United States*, a controversial book edited by Dr. Aitken which indicates that slavery was a profitable form of labour despite the frequently high landed cost of slaves.

As Claude Bissell Professor, Dr. Aitken will give public lectures, and take part in graduate seminars in economic history. He is, he said, "here to be useful". The Bissell Chair was established in 1973 by the Associates of the University of Toronto, Inc. of New York to mark their 25th anniversary and to honour the former President of the University.

### Open meeting Jan 14 on part-time posts

The Working Group on Part-time Academic Appointments is holding an open meeting on Tuesday, Jan. 14 in Croft Chapter House, University College, at 4 p.m. All those interested in ques-

tions relating to part-time academic appointments are invited to attend. Anyone wishing to make a presentation to the Committee should call Michael Dafoe at 928-4980.

## STAFF NOTES

## Two university scientists honoured

The Optical Society of America has honoured two U of T physicists for their outstanding research in light spectroscopy. Chairman of Engineering Science, DR. BORIS STOICHEFF was voted president-elect of the Society for 1975 - the first non-American to hold this position - and physics professor HARRY L. WELSH, former chairman of the department, received the Society's William F. Meggars Award for his achievements in molecular spectroscopy and intermolecular forces.

Dr. Stoicheff succeeds Arthur L. Schawlow, a co-inventor of the laser, who became president of the Society on Jan. 1. Dr. Stoicheff's own research interests for the past 15 years have been in

mittee of WMO. He was visiting professor at the Swiss Federal Institute of Technology in Zurich for the summer semester, 1974, and conducted seminars at the Institute for Atmospheric Physics of ETH. During August he directed experiments on the artificial growth of hailstones by a U of T group at the Swiss Federal Institute for Snow and Avalanche Research in Davos. On Sept. 27 he attended the first meeting of the Canadian National Committee, IUGG/NRC. At a meeting of the U.S. University Corporation for Atmospheric Research (the body which runs the National Center for Atmospheric Research in Boulder, Colorado) he was elected trustee of UCAR and also as one of the five members of its Scientific

Aspects of *narodnost'* in recent Soviet literature."

The following members of the Department of Slavic Languages and Literatures participated in the sessions of the Russian section of the Ontario Modern Language Teacher's Association Fall Conference, Oct. 5 at Trent University: ANDRY KLIMOFF (Language Laboratory and representing the Russian Cultural Centre, Toronto) "Russian Culture in Toronto"; PROFS. GLEB ZEKULIN, "Sólozhensyn as a Writer in the Light of his Latest Works"; IRINA EVREINOVA, "A Linguistic and Psychological Approach to the Teaching of Russian"; co-chairman at both sessions was GALINA KRUBERG.

PROF. D. STRUK gave a lecture on Oct. 5 at the Ontario Modern Language Teachers' Association Fall Conference on "Aspects of Modern Ukrainian Poetry."

## Scarborough College

At the end of September and the beginning of October PROF. A. FRANCESCHETTI attended an international convention to celebrate the fifth anniversary of the birth of Ludovico Ariosto, organized by the Accademia Nazionale dei Lincei in Rome; he was invited to read a paper on the relations between Boiardo's *Orlando Innamorato* and Ariosto's *Orlando Furioso*.

PROF. A. GRIFFIN has given seminars on "Mean Field Theory of the Ferromagnetic Transition in Metallic Films" at the following times and places: IBM Research Laboratory, Zürich (March 18); Institut für Festkörperforschung, Jülich, Germany (March 29); University of Liege, Belgium (April 25); Technical University, Hanover, Germany (May 7); University of Paris, Orsay, France (May 14); University of British Columbia (August 1). He gave a talk on "Normal Modes and the Surface Correlation Energy of a Metal" at University of Cologne, Germany (May 22). A special series of invited lectures on "Collective Modes in Metallic Films: Surface and Finite-Size Effects" was given at Simon Fraser University in the month of July.

PROF. J.A. LEE was elected to the Groves Conference on Marriage and the Family, a North American organization of professionals (sociologists, psychologists, counsellors, etc.) which has a limited, elected membership and which meets annually to discuss changing social patterns of marriage and the family. Prof. Lee presented a paper at the 1974 meeting.

PROF. S. WHALEN gave a paper on "Impersonal Sentence in Russian" at the Soviet-American Conference on the Russian Language held at the Massachusetts Institute of Technology on Oct. 12. The conference, jointly sponsored by the Pushkin Institute of Moscow and the M.I.T., was in two parts: theoretical at M.I.T. and applied at Amherst College. Many delegates attended from the U.S.S.R. and the U.S.A., but only two from Canada.

## Russian and East European Studies

PROF. H. GORDON SKILLING visited Carleton University on Nov. 11 and 12 and engaged in two seminars at the Institute for Soviet and East European Studies; one entitled "Pressure Groups and the Communist Politics" and the other on his research on "Czechoslovakia's Interrupted Revolution".



## Order of Canada honours

University Professor John C. Polanyi, one of Canada's most distinguished chemists (above), has been made an Officer of the Order of Canada in the year-end list of those honoured for their contributions to Canadian life. Also honoured in the same list are Dr. J. Tuzo Wilson, recently retired principal of Erindale College and a noted geophysicist, now director of the Ontario Science Centre, who was named a Companion of the Order, and J. Burdon Bickersteth, warden of Hart House 1921-1947, who becomes an Officer. Mr. Bickersteth, 86 years of age, lives in Canterbury, England.

## OISE gives fellowships

The 1974 awards of Fellow of the Ontario Institute for Studies in Education were conferred Nov. 26 on four persons in recognition of their contributions to educational leadership in Ontario. Three of the new Fellows are Dr. Nora R. Hodgins, William J. McCordic, and Dr. E.J. Quick. The fourth, Donald M. Graham who died in September, was honoured posthumously.

Dr. Nora Hodgins served as secretary-treasurer of the Ontario Teachers' Federation from 1944 until her retirement earlier this year, and now is secretary-treasurer of the Ontario Association for Curriculum Development. Dr. Hodgins has been instrumental in the founding and development of many influential educational organizations.

William J. McCordic is executive director of the Ontario Association of Education Administrative Officials. Following service as a teacher, principal, and business administrator and superintendent of public schools for the East York Board of Education, Mr. McCordic was appointed

executive secretary of the Metropolitan Toronto School Board when it was established in 1953 and served in that position until 1967 when he was appointed director and secretary-treasurer, a position he held until 1972.

Dr. E.J. Quick is chief educational officer, research, in the Planning and Research Section of the Ministry of Education. Dr. Quick has been a teacher, teachers' college master, and assistant superintendent of curriculum, and has held a number of key administrative posts. Dr. Quick is also the author of textbooks in geography and English.

Donald M. Graham, honoured posthumously, was director of education for Forest Hill Village until it became part of Toronto. Mr. Graham joined the staff of OISE in 1966 as a member of the Department of Educational Administration. His responsibilities were chiefly in field development - consulting with school administrators and holding workshops in leadership development - and in teaching courses on the administrative process.

## Nurses from Cuba visit the U of T

In recognition of the need to up-grade nursing in Cuba, the Cuban government formed a working group to plan a post-diploma basic degree nursing program at the University of Havana.

Four delegates visited the U of T Faculty of Nursing from Nov. 25 to 28 to learn from Canadian experience and translate planning into operation.

The visitors were: Dora Rodriguez, Chief Nurse for Cuba; Sylvia

Gomez, nurse in the Ministry of Public Health, involved with planning the post-diploma basic baccalaureate program; Nilda Bello, nurse teacher at the National School of post-basic health education, also involved in the development of a university nursing program; Maria Fenton, Director of Nursing at the National Hospital (1,000 beds) who was fluent in English and served as interpreter for the delegation.

## Award to study environmental health

Dr. David K. Parkinson has been awarded a one-year fellowship in environmental health by the Hospital for Sick Children Foundation. He is attending the Kresge Institute of Environmental Health at Harvard University.

Educated in Oxford and Edinburgh, Dr. Parkinson was an assistant professor in the Departments of Paediatrics and Clinical Chemistry at U of T; staff physi-

cian and investigator in the Research Institute of the Hospital for Sick Children; and a member of the Toronto Board of Health.

Dr. Parkinson's is the first fellowship to be awarded by the Foundation. These were established to fill an apparent unmet need in five disciplines: nutrition, infectious diseases, mental retardation, environmental health, and clinical pharmacology.

Boris Stoicheff

Harry Welsh

the field of laser physics, in which he has made significant contributions in more than 40 publications. His earlier research, after gaining his doctorate in 1950 at the U of T, was on Raman spectroscopy. This latest honour follows many others awarded to Dr. Stoicheff, including a fellowship of the Royal Society of Canada, and of the American Physical Society, and the 1974 Medal for Achievement in Physics.

Harry Welsh, likewise a graduate of the U of T, is also a much-honoured man, being a Fellow of the Royal Society, and of the Royal Society of Canada, recipient of the Canadian Association of Physicists Gold Medal, and of the Order of Canada's Medal of Service. The citation for his latest award, read at the Society's annual meeting in Houston, Texas, recognised his "pioneering studies of pressure-induced absorption by homonuclear molecules, by rare gas mixtures, and by molecular complexes; his original contributions to the spectra of solid hydrogen; his outstanding developments in Raman spectroscopy of gases and his life-long devotion to teaching and research in molecular spectroscopy."

## Arts and Science

PROF. L.M. KENNY attended the American-Arab University Graduates' Conference at Cleveland, Oct. 25-27 and delivered a paper on "The Middle East in Canadian Social Science Textbooks".

PROF. E. BIRNBAUM presented a paper on "Training Middle Eastern Booksellers to Service North American Libraries" at the annual meeting of the Middle East Librarians' Association held at Harvard University on Nov. 6.

PROF. R. LIST has been re-appointed chairman of the Working Group on Cloud Physics and Weather Modification of the Commission of Atmospheric Sciences of the World Meteorological Organization, and chairman of the Panel of Experts on Weather Modification of the Executive Com-

mittee Evaluation and Goals Committee. Between Oct. 15 and 18 Prof. List was chairman of the WMO International Typhoon Modification Conference in Manila, and gave the opening lecture entitled "The Warm-rain Process, Its Modelling and Modification."

The University of Toronto received a Negotiated Grant from NRC to build up a group in Atmospheric Dynamics. PROFS. W.R. PELTIER and H.R. CHO have already joined this new program. A third new academic staff member will be appointed in 1975.

PROF. F.I.M. CRAIK of Erindale College gave a talk on "Some Recent Studies on 'Depth-of-Processing' in Human Memory" at Queen's University on Oct. 24, and at the University of California at Berkeley on Oct. 30.

PROF. JOHN J. FUREDY attended the meetings of the Psychonomic Society in Boston during November and, with PROF. G.B. BLEDERMAN of Scarborough College, presented a paper entitled, "Methodological Problems in Evaluating Rate Preference for Signalled or Unsignalled Shock."

PROF. LUBOMIR DOLEZEL has been invited to serve on the editorial board of a new international journal of general and comparative literature *PTL - Poetics and Theory of Literature*; the journal will be edited by Prof. B. Hrushovski of the University of Tel Aviv.

PROFS. D.G. HUNTLEY, K.A. LANTZ, RICHARD H. MARSHALL, Jr., D. STRUK, R.D.B. THOMSON and GLEB ZEKULIN attended the First International Conference of Slavists "Banff '74", Sept. 3-8. Prof. Marshall presented a paper entitled "The Polish Catholic Community in the Soviet Union". Prof. Zekulin presented a paper entitled "Dorosh." Prof. Thomson presented a paper entitled "Khlebnikov and 3<sup>4</sup> + 3<sup>5</sup>" and chaired a special study session on "Some

# Evans: We need 'fair share' to do job

The following are extracts from the University's submission to the Ontario Council on University Affairs, given by President John R. Evans:

Besides the dispersion of opportunities for university education through the province, the provincial system must support concentration so that there will be areas of excellence, institutions of international stature. The University of Toronto strives to serve the province as one of the institutions in this category, *without* asking for special non-formula support apart from its "emergent" suburban colleges. In a period of prolonged austerity it becomes extraordinarily difficult to keep up the requisite standards in professional and graduate training in a large-scale operation. We have trained well over half of the health sciences personnel, foresters and architects, a large proportion of the engineers and social workers and musicians, a very large proportion of the Ph.D.s in the humanities, social sciences and sciences. We have been in exactly the same situation as all the universities in receiving less-than-inflationary increases in these recent years, and therefore having to cut off funds from equipment and supplies, defer maintenance and ignore provisions for replacement, in order to be able to pay competitive salaries.

#### 'Sympathetic understanding'

To function as a centre of excellence requires a heavy emphasis on research and graduate studies; it should be the aim of all of us to prevent Canada from becoming an intellectual branch plant, and therefore we must have first-rate graduate training and research activity in Canadian universities.

Toronto is not asking for special treatment related to the responsibilities that weigh more heavily on us than on any other institution in the system, but we do ask for sympathetic understanding. The factor above all else that gives us confidence is the judgment of young people, expressed in their first choices of where they want to study; our image of tough, hard, honest scholarship appeals to them. So long as that is the case we are justified in asking for our fair share of the tools to finish the job.

#### Suburban college pressures

In view of the forecasts of student population, it will probably be important for the province to ensure that Erindale College is able to develop to its planned size of 5,000 students since, unlike most of the rest of Ontario, Peel and Halton counties will have fast-growing secondary school populations during the 1980s. In Scarborough College the general pressure of applicants throughout the Metro area is expected to produce similar demands. So that, unless the phenomenon of metropolitan growth can be reversed in Ontario, it appears that the suburban colleges will soon be under the same pressures as the central campus. Each of them was planned with a target of 5,000 students and with room for further development if needed. We believe that the Ontario Council on University Affairs will have to look closely at the Government's apparent intention of withholding support from these colleges. It has meant that the central university has had to pay their "emergent" grants, and this we cannot afford.

We endorse the recommendation of the Council of Ontario Universities that the new Ontario Council on University Af-

Each year, usually in November, the provincially-supported universities make a formal submission of their problems, plans, and financial needs to the body that acts as the buffer between them and the Ministry of Colleges and Universities. Until 1974 that was the Committee on University Affairs — now it's the Ontario Council on University Affairs, appointed by the provincial government to be an adviser to the Minister.

The Council heard the University of Toronto brief, presented by President John Evans, on Dec. 20. Presiding at the session was the new chairman of the Council, Dr. Stefan Dupré, who, before he took the post, was chairman of Political Economy at U of T.

The University's brief covered immediate capital needs and financial (operating) problems for 1975-76. The Council had indicated that its immediate concerns were of a short-term nature and that long-range plans for the Ontario system and the part U of T would play in them would be dealt with in the spring of 1975.

Some of the principal points in the University of Toronto presentation are on this page.

fairs should direct immediate attention to improving the criteria, through mini-formulae if possible, for determining appropriate levels and distribution of supplementary support. Otherwise the formula's visible fairness could be neutralized through special pleadings.

#### Capital spending program

We agree with COU in opposing any change which would result in the allocation of research funds through an artificial and arbitrary separation of research and instruction. We would go further, and endorse John B. Macdonald's statement that "It is not helpful to assume that teaching is primary and research is secondary. Both are essential to the idea of a university as that idea has evolved... This is not to say that the relative emphasis on each is not a proper question of policy. Indeed it is, but it can be settled very differently at different universities".

Finally, we agree most emphatically with COU's contention that the lack of planning time between the announcement of the level of operating income and the beginning of the period to which it applies is a serious disadvantage, making rational resource application extraordinarily difficult.

#### Capital problems

We are developing a long-term capital plan on the assumption that eventually some capital funds for renovation and replacement of ancient structures on the St. George campus and for completion of the original plans for both the suburban campuses will be made available in stages. Inevitably such a plan requires two things: a *possible* level of funding, i.e. more than \$55 per NASF; and a commitment of phased capital funding for a substantial period... A succession of year-to-year announcements offers no opportunity for a university to carry out a carefully planned program of capital renovations.

Toronto's immediate problems on the central campus arise from the age, inappropriateness and inadequacy of many of the motley collection of buildings we have inherited, adopted and built. The downtown campus consists of approximately 130 buildings occupying some 120 acres. Since enrolment is expected to remain virtually stable for at least the next decade, the University does not intend to expand beyond the geographical limits of the rectangle enclosed by Bloor, Bay, College and Spadina. It is the University's objective to plan the most sensible use of this area with due regard for the surrounding communities' concerns as well as for its own academic needs...

Age alone does not make a building obsolete, of course, and the University has done its best to

renovate and restore buildings which can still be used efficiently. There are some buildings, however, which defy renovation or which are uneconomic to restore. The older buildings — and about 25 per cent. of the buildings on the St. George campus are over 40 years old — often do not meet minimum modern standards of lighting, ventilation and fire safety. They should either be renovated or demolished and replaced because their operation and maintenance constitutes an expensive annual charge to the operating budget.

#### In agreement with COU

The University's capital spending program over the next few years must, therefore, be part of an integrated plan for optimizing space utilization on campus. This will entail building replacement space to permit the vacating of leased space and high cost buildings which should be demolished. It will include a carefully planned, long-term program of major renovations...

The basic problem at Scarborough is that enrolment has now surpassed the capacity of the physical plant. The original plan was that the College would increase enrolment up to 5,000 students by 1980. The lack of capital funding has delayed construction of Phase III of the College and although an application for a new building is before the Ministry, a decision has had to be taken recently to reduce the number of students permitted to enter first

year next year in order to stabilize enrolment at the 1974-75 level.

It is feared that a substantial and rapidly increasing number of students will have to be turned away starting in 1975...

#### Erindale College Campus

The problem at Erindale is similar to that at Scarborough. Enrolments will be restricted starting next year in order to stabilize at 3,500 within a year or two. Expansion beyond an enrolment of 3,500 full-time students can only occur when additional facilities are provided.

At the very minimum adjustments are necessary at Erindale to optimize the use of existing plant. Modest capital funds are required for this, and to meet equipment needs to match requirements at the 3,500 student level.

#### Operating problems

*The section of the brief having to do with current operating problems opened with the outline of what may happen in 1975-76 and thereafter, as summarized on the front page of this Bulletin. The brief continued:*

For several years now, faculty members have accepted increased teaching loads and programs have been realigned to eliminate duplication and low priority courses. Increasing the number of students taught by a faculty member is already being done... We have gone a long way in this direction already: for the last two years there has been an over-all increase in the ratio of student BIUs to full-time equivalent faculty of 5 per cent. per year. In terms of the type of productivity sought by our provincial government masters, this 5 per cent. per annum increase in productivity matches the target set by the Economic Council of Canada in its most recent report (11th annual review). Furthermore, the increase in productivity in this University would stand up well by comparison with other sectors of the service economy — for example, health, or the civil service itself...

In other words, there is a limit to what more we can do. And, in spite of all we can possibly do, there is no way of avoiding real damage at the present and prospective levels of funding.



#### Michael Charles named chairman

Michael E. Charles has been appointed chairman, Department of Chemical Engineering and Applied Chemistry, effective July 1, 1975. Prof. Charles will succeed Prof. William F. Graydon.

Michael Charles graduated from the Imperial College of Science and Technology in 1957 and subsequently obtained his Ph.D. at the University of Alberta. He held positions with the Alberta Research Council and Imperial Oil Ltd. before joining the U of T in 1964 and being promoted to the rank of professor in 1971. His research in the field of fluid mechanics relates directly to the design of chemical process equipment and pipeline transportation systems. In this context he was invited to serve on the Great Plains Project which reported directly to the Prime Minister on the development of the west and north of Canada and to give many technical presentations abroad.

#### Dr Cobbold director

The appointment of Prof. Richard S.C. Cobbold as director of the Institute of Biomedical Engineering has been confirmed. Prof. Cobbold, a professor in both the Department of Electrical Engineering and the Faculty of Medicine, has been acting director of the Institute since Prof. Norman Moody relinquished the position on June 30 last. Dr. Cobbold has been on U of T staff since 1966.

## A professor 'bleats' to his MPP

The Bulletin of Dec. 13 carried a report that Queen's University faculty members were being asked to take to the public the universities' claim for increased financial support from the Ontario government. "Anticipating our Queen's colleagues, I bleated the enclosed to my M.P.P. some time ago. So far no howls!" says Prof. P.C. Stangeby, Aerospace Studies, in a letter to the Bulletin. Prof. Stangeby enclosed a copy of a letter he wrote on Dec. 2 to the Hon. James Auld, Minister of Colleges and Universities. Both the professor and the minister are from Brockville.

#### Prof. Stangeby's letter

Dear Jimmy:

As one Brockvillian to another — the universities are not falsely crying wolf ("Universities Crying Wolf: James Auld" Toronto Star, Nov. 29). He has definitely been sighted — quite near to Queen's Park, too (tall critter, good looking, answers to 'Jimmy' — you may have seen him). In fact, he

has already taken a nip or two out of us here at U of T and it seems like he is out for the jugular now.

On the off-chance that you might encounter him or the rest of his pack — could you explain a few facts of academic life to him:

University classes in the early years are too large (up to 200 and more).

Classes in the higher years are of reasonable to small size (10-20). Considering the enormous wealth of knowledge which we inherit from the past 3,000 years, and its necessary subdivision into many categories, these advanced classes could only be large if our first year in-take were about 100,000 students.

Our universities are already so large and impersonal that they border on the inhuman.

If 40 hours is taken as a reasonable work week (I am sure there must be some profs who put in 40 hours or less — I am still searching for one) — and if a sensible teaching/research ratio is 50/50, then all the academics I know are carrying a proper teaching load.

Increases in student/staff ratio, and the associated decline in research activity would ensure that

U of T and others would sink into mediocrity, giving Canada no universities of any international reputation. For other, presently reputable institutions, it would be descent to ignominy.

As to academic remuneration, my own situation is indicative — I would be better off as an airport fireman than I am as an aerospace professor.

Already the combined pressures on universities are convincing some of the best academics they should abandon ship — and are making it increasingly difficult to fill junior openings with good people.

Ever-striving to realize our liberal-academic death-wish and so accommodating we absorb any blow, so well-rounded we roll in any direction we are pushed, so meekly led it is easy to bully us — we go the second notch when ordered to tighten our belts — only to have our reduced deficit thrown back in our kicked-in teeth as evidence that we never really needed the cash in the first place.

Yes, Jimmy, there really is a wolf — but the lambs won't go dumb to the slaughter.



### Woodsworth's assistant principals

Woodsworth College now has two assistant principals to help Principal Arthur Kruger with administration. Above are Assistant Principal Mary Laurence, appointed for a three-year term, and Alex R. Waugh, Assistant Principal and Registrar for an unspecified period. Mary Laurence, who has been on U of T staff since 1959, has three degrees from this University: B.A., M.A., and Ph.D. She is a professor of psychology. Mr. Waugh, a B.A., was a senior officer in the Division of Extension before it was split into Woodsworth College and the School of Continuing Studies.

## 'Some pretty hot stuff'

About 40 geologists and mining company representatives were told in ways they could improve their chances of spotting nickel deposits, during a recent seminar sponsored by the Department of Geology.

According to Prof. Tony Naldrett, organizer of the seminar, the mining men were let in on "some pretty hot stuff."

The group was given special instruction on the characteristics of certain kinds of mineral deposits so-called ultramafic and mafic rocks. These, it has only recently been concluded, were formed by a flow of volcanic material across sections of sea floor more than three billion years ago. Such flows are associated with sulphide deposits which contain minerals such as nickel, iron and sulphur.

"Detailed studies of the origin, formation and composition of these types of rocks are so new," said Prof. Naldrett, "that Ph.D. theses and reports to be submitted by University geologists for publication aren't yet completely finished. In fact, many of the findings will not be published for another two years."

"However, we sponsored the seminar to help out geologists in

the mining industry, since they don't have that much time for the more theoretical and experimental work."

Recent nickel discoveries in Australia and one in the Timmins area of northern Ontario have been made in these ultramafic and mafic rocks.

Material presented at the seminar included the results of recent Ph.D. studies by Nick Arditi in the Timmins area, Derrick Fisher in Australia, and Paul Mainwaring in northern Minnesota.

"We told the visiting geologists how they could better recognize groups of these rocks in the field and which particular rocks within the groups would make the best targets for nickel exploration. The newest theories on the formation of such sulphide deposits were also explained," said Prof. Naldrett, who was one of the first to propose their volcanic origin.

And what do the geologists think of the seminar? "The seminar that we work for Ontario's Ministry of Natural Resources summed it up pretty well: 'We've got to know what we are talking about and this type of seminar gives us a two or three year jump on the normal reporting process.'"

### Commonwealth travel grants available

The Association of Commonwealth Universities has travel grants available for the promotion of interchange between universities in Commonwealth countries.

The grants are for travel costs only and are available to professors or university officers on sabbatical leave; distinguished university scholars invited by universities for short visits; and post-graduate research fellows holding research grants.

### High speed travel? Try using the ground

The Royal Canadian Institute lecture on Saturday, Jan. 11 at 8:15 p.m. in Convocation Hall will be given by Prof. David L. Atherton of Queen's University on the subject of inter-city ground transportation.

A 300 mph high-speed guided ground transport link could cut travel times between downtown Toronto and downtown Montreal

Funds for the scheme are derived from contributions made on behalf of the United Kingdom, Australia and Hong Kong. Awards are made for travel between either the U.K., Australia or Hong Kong and another Commonwealth country.

Copies of the conditions of the awards under the Commonwealth University Interchange Scheme, and an application form, have been sent to all principals, deans and directors.

to two hours. A high speed system would also allow a single, centrally-located, airport to serve Toronto, Montreal and Ottawa efficiently.

Prof. Atherton assembled and leads a large inter-disciplinary team from Queen's and McGill Universities and U of T investigating motor propulsion for high-speed inter-city transit.

## COMING EVENTS

### JANUARY

#### 10 FRIDAY

**Colloquium: Chemistry** - "Charge Distribution and Catalytic Properties of Metal Complexes" - Prof. D. R. Eaton, McMaster University, 158 Lash Miller Chemical Laboratories, 4 p.m. (Chemistry)

#### 11 SATURDAY

**Lecture: Transportation** - "300 mph Inter-City Ground Transport", illustrated with slides. Prof. David L. Atherton, Department of Physics and the Canadian Institute of Guided Ground Transport, Queen's University. Convocation Hall, 8:15 p.m. (Royal Canadian Institute)

**Music** - "Canadian Soundscape" with R. Murray Schafer, Bruce Davis, Peter Huse, Barry Truax and Howard Broome. Walter Hall, 8:30 p.m. Tickets \$3, students \$2 with I.D. Reservations 967-5257 (New Music Concerts)

#### 13 MONDAY

**Seminar: Middle East** - "Canada and the Middle East" - M. Jean Marie Delisle, Director, Middle East Division, Department of External Affairs. Combination Room, Trinity College, 4-6 p.m. (Middle East Studies Committee, International Studies Program)

#### 14 TUESDAY

**Colloquium: Astronomy** - "Seyfert Galaxies" - Dr. Daniel Weedman, University of Minnesota. David Dunlap Observatory, 4 p.m. (Physics and Astronomy)

#### 15 WEDNESDAY

**Lecture: Victorian Photography**, Illustrated talk. Prof. Alan Thomas, Department of English, Council Chamber, Scarborough College, 1 p.m.

**Radio** - "Persian Literature - Affirmation of Identity" - CIRT-FM (91.1) 10 a.m. and 7:30 p.m. (Islamic Studies and Open College)

#### 16 THURSDAY

**Seminar: Addiction - "Issues in Treatment" series: "The Politics of Treatment" - Dr. James Rankin, Clinical Institute, Addiction Research Foundation, Auditorium, 33 Russell St., 12 noon. (Addiction Research Foundation)**

#### 18 SATURDAY

**Lecture: Dentistry** - "The Longer You Wait, the Worse It Gets" - illustrated with colour slides. Dr. Jack G. Dale, Chairman, Centennial Committee, Dental Education in Canada. Convocation Hall, 8:15 p.m. (Royal Canadian Institute)

#### 19 SUNDAY

**Music** - Bach Youth Ensemble

Meeting Place, South Building, Erindale College. Free. 3:30 p.m.

#### 21 TUESDAY

**Colloquium: Astronomy** - "White Holes" - Kayll Lake, Department of Astronomy, David Dunlap Observatory, 4 p.m. (Astronomy)

**Seminar: Pharmacology** - "Biochemical Identification of Receptors" - Dr. S.J. Enna, Department of Pharmacology and Experimental Therapeutics, Johns Hopkins School of Medicine, 4171 Medical Sciences Building, 11 a.m. (Pharmacology)

**Colloquium: Anthropology** - "The Visibility of Iroquois Political Dispute" - Prof. Sally Weaver, Department of Planning and Anthropology, University of Waterloo. Main floor theatre, Library Science Building, 4 p.m.

**Colloquium: Institute for the History and Philosophy of Science and Technology** - "The View of Thomas Aquinas on the Validity and Value of Natural Philosophy" - Prof. J.A. Weisheipl, Pontifical Institute of Medieval Studies, 397 Sidney Smith Hall, 4 p.m. Refreshments 3:30. (IHPST)

**Colloquium: Physics** - "Electric Dipole and Quadrupole Giant Resonances in Nuclei" - Dr. Evans Hayward, National Bureau of Standards, Washington, D.C. 102 McLean Physical Laboratories, 4:10 p.m. (Physics)

**Music** - Cornelius Cardew, English pianist and composer. Walter Hall, 8:12 p.m. No tickets, no charge. (Music)

**Music** - Christopher Weait, bassoon; Eugene Rittich, French horn; George Brough, piano and harpsichord. Walter Hall, Edward Johnson Building, 8:30 p.m. Tickets \$4, students and senior citizens \$2 with I.D. Cheques payable "U of T", enclose stamped addressed envelope. (Music)

**12 WEDNESDAY**

**Meeting: History and Philosophy of Science and Technology** - "Is the Dewey-Marx Correspondence Authentic?" Prof. Lewis Feuer, Department of Sociology, 1016 New College, 40 Wilcock St. 8 p.m. (HIPST)

**Meeting: Victoria Women's Association** - Guest speaker, Mrs. Frank P. Fidler, former president of the W.W.A. Wymilwood, 150 Charles St. West, 2 p.m.

**Radio** - "Turkish Literature Through the Ages", CIRT-FM (91.1) 10 a.m. and 7:30 p.m. (Islamic Studies and Open College)

**Opera** - "Elixir of Love" (Donizetti) Wednesday Jan. 22; Friday Jan. 24; Saturday Jan. 25; Monday Jan. 27. No performances Thursday or Sunday. MacMillan Theatre, Edward Johnson Building, 8 p.m. Tickets \$3.50, students and senior citizens \$2 with I.D. Cheques payable "U of T", Enclose stamped addressed envelope. (Music)

#### 23 THURSDAY

**Seminar: Addiction - "Issues in Treatment" series: "Research into Treatment: Problems and Opportunities" - Dr. George Blake, Alcoholism Treatment Unit, Whitby Auditorium, 33 Russell St. 12 noon. (Addiction Research Foundation)**

**Colloquium: Physics** - "High Resolution Spectroscopy" - Prof. Boris Stashkevich, Department of Physics, 102 McLean Physical Laboratories, 4:10 p.m. (Physics)

**Theatre: Aristophanes' "Frogs"** - New adaptation by Martin Hunter and Michael Macina. Directed by Martin Hunter. Hart House Theatre, Jan. 23 - Feb. 1. No performances Sunday or Monday. 8:30 p.m. Tickets \$3, students \$1.50 with I.D. (Centre for the Study of Drama)

#### 25 SATURDAY

**Conference: "Music for Children"** - National conference Orff-Schulwerk Society of Canada. Saturday Jan. 25 and Sunday Jan. 26. Hermann Regner, director Orff-Institute, Salzburg; Barbara Haselbach, professor of dance, Orff-Institute, Salzburg; Mario Duschenes, director CAMMAC, Walter Hall, Edward Johnson Building. Sessions begin Saturday at 9:15 a.m., Sunday at 9:30 a.m. (Music)

## EXHIBITIONS

"A penny plain, twopence coloured", an exhibition of toy theatre from the juvenile drama collection of the Thomas Fisher Rare Book Library. In the Library, Dec. 16 through January.

Earla Alexander, exhibition of paintings. Meeting Place Gallery, Scarborough College, To Jan. 27.

Exhibition of prints by Nira Bengal. Admissions office, Faculty of Education, 310 Bloor St. West. To Jan. 31.

Charles Pachter, exhibition of paintings and prints. Art Gallery, Erindale College. Monday - Thursday, 9 a.m. - 11 p.m.; Friday 9 a.m. - 5 p.m.; Saturday 10 a.m. - 5 p.m.; Sunday 2 - 5 p.m. To Jan. 31.

Japanese Nineteenth Century woodblock prints. New Academic Building, Victoria University, 73 Queen's Park Crescent East. To Jan. 24.

Martin Myers, exhibition of pen and ink sketches, life drawings in pencil and ink, and freehand architectural renderings. Exhibition Gallery, Faculty of Architecture, 9 a.m. to 6 p.m. Monday - Friday only. To Jan. 24.

William Rock Jr. and Henry Scheffer, "Ideas"; exhibition of paintings, collages and sculpture dealing with some of the ideas and forces governing environmental design. Exhibition Gallery, Faculty of Architecture, 9 a.m. to 6 p.m. Monday - Friday only. Jan. 16 - 24.

Current displays in the Robarts Library: Emil Nolde (1867-1956) a leading expressionist; and The Prolet Portfolio, 1947, and new books on Australia - The Land

Down Under. To mid-February. "Probing the Planets" looks at the most recent data from the Pioneer and Mariner spacecraft expeditions. Show lasts about 50 minutes. Theatre of the Stars, McLaughlin Planetarium. Show times: Tuesday - Friday 3, 8 p.m.; Saturday 2, 3:30, 7, 30, 9 p.m.; Sunday 2, 3:30, 5, 7, 30 p.m.; holidays 2, 3:30 p.m. Admission \$1. Children under the age of six not admitted. Jan. 23 to March 16.

## RESEARCH NEWS

### Connaught Fund

All faculty members intending to submit an application to the Connaught Fund should be reminded that applications, four copies, should reach ORA by Monday, Feb. 3 at the latest.

### Canadian Steel Industries Construction Council

Members of the engineering faculty are invited to apply for re-

search grants offered by the CSICC for research on subjects judged to be of value in advancing the use of steel in construction. Applications must be received by CSICC by Feb. 4 and should be forwarded through ORA prior to that date. Additional information is being sent to departmental chairmen.

### Who Can Help in ORA

For further assistance phone 928-2163.

